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ORANGE COUNTY AMATEUR RADIO CLUB

VOL. XV, NO. 10

P.O. BOX 95, ORANGE, CALIF. 92668

OCTOBER, 1974

- AUCTION -

**OCARC
ANNUAL
AUCTION**
OCT. 18th



— 1974 CLUB OFFICERS —

PRESIDENT	KEN KONECHY	W6RHC	541-6249
V. PRESIDENT	ART SHELDON	WA6LHB	832-9676
TREASURER	HAROLD RICHARDS	WA6BJO	544-0033
ACTIVITIES	MARTIN RAYMOND	WB6PEX	532-4090
SECRETARY	TINA MCCARTHY	WB6WFFV	538-6072
MEMBERSHIP	TED GLICK	K6LJA	542-1390
PUBLICITY	FRIED HEYN	WA6WZO	549-8516
TVI	KEI YAMACHIKA	W6NGO	538-8942
M.A.L. :	ERNIE FUERTE	WA6GXV	839-7107
	BOB ECKWEILER	WB6QNU	639-5074

EDITOR	NEIL VADNAIS	WA6TZA	839-7378
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OCARC ACTIVITIES

MEETING 3rd Friday of each month, 7:30 PM at:

Mercury Savings and Loan
1095 Irvine Blvd. (4th Avenue)
Tustin, California

GUESTS ARE ALWAYS WELCOME

BREAKFAST 1st Saturday of each month, 8:30 AM at:

SAMBO'S RESTURANT
2101 E. First Street (1-block west of Tustin Ave.)
Santa Ana, California
MEETS IN THE BACK OF THE ROOM

15M NET Club station W6ZE meets every Wednesday
at 8:00 PM on 21.375 MHz. All amateurs
are welcome to check in. Club and ARRL
bulletins read.

15M CW NET Club station W6ZE meets every Wednesday evening
from 7PM to 8PM on 21.175 MHz. All amateurs
are welcome to check in. Lots of CW practice
for everyone.

CALLBOOK SERVICE

The club has copies of the latest callbooks which are available at each meeting. Also, you can contact Martin-WB6PEX on Monday and Thursday evenings between 7:00 PM and 9:00 PM if you need addresses. If you have more than one call for Martin to check, he'll get them all and call you back the same night. Also, look for Martin after the Wednesday evening net.

THE PREZ SEZ:

A special Board of Directors meeting was called on October 3, 1974. The topic of this meeting was to inform your officers of an interference case that had been developing in the Tustin Meadows area for over one year. The ham involved is Lynn Hull - WB6PEF, who joined our club in September of this year. The primary complainants are Dr. & Mrs. Boswell and a few other neighbors. The complaints cover a wide spectrum and include: (1) TVI, (2) HOME ENTERTAINMENT EQUIPMENT, (3) TELEPHONE INTERFERENCE, and (4) possible "illegal" antenna in a "restricted" community. While Lynn-PEF suffers no interference at his own QTH, his neighbors had gotten no assistance from the government agencies that they had contacted and were frustrated to the point that several legal actions are being considered.

A lot of background information was obtained and the details of the case were reviewed by the Board. Those Board members who were there were unanimously in favor of getting involved with the case and seeing what results we could obtain. The following plan was developed:

- 1) Checkout the station of Lynn-PEF.
- 2) First, attack the telephone interference.
- 3) If successful, next attempt to clear up the Boswell's TVI.
- 4) Finally to attempt to clear up the Boswell's stereo interference.

The Board Members felt that little could be achieved in the legal antenna "question".

On October 5, your club assisted Lynn-PEF in bringing together the Phone Company and the Boswells for another attempt to clear up the telephone interference. Art-LHB, Kei-NGO, Martin-PEX, Tina-WFV, and myself participated. As it turned out, Lynn's equipment was found to be operating properly and the Phone people had already gone a long way toward attenuating the interference. Mrs Boswell agreed that the phone calls were no longer being interfered with. Finally, Mr Wilkes of the Phone Co. and myself obtained the names of other neighbors who had similar problems. We personally visited these people and Mr Wilkes assured them that his people would be out in a few days.

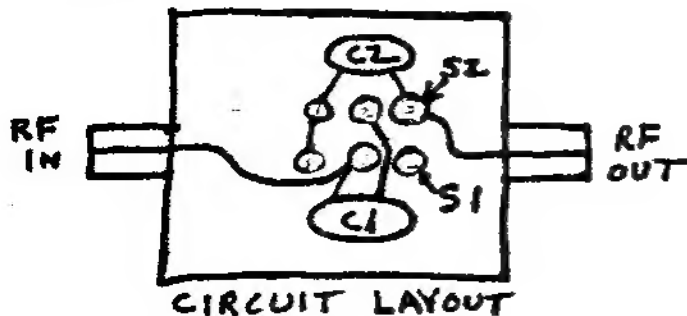
With these problems eliminated, your club plans next to attack the TVI. But we need YOUR help and experience. Those of you interested in assisting should get in touch with Art-Lhb or me. I am sure that with a little effort, we can show the people of Tustin Meadows and the officials of Tustin that HAMS are CONCERNED people.

K - W6HHC

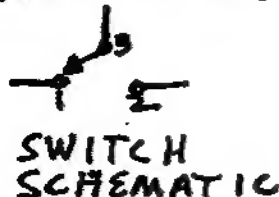
CAPACITOR SWITCHING UNIT

The unit described here was designed for coupling an RF signal to a frequency counter. It could also serve as a capacitance substitution box. The unit is wired to provide interconnection of 2 capacitors in all possible combinations, i.e. the capacitance between input and output can be C1, C2, C1 + C2 in series or C1 + C2 in parallel depending upon the setting of two single-pole switches.

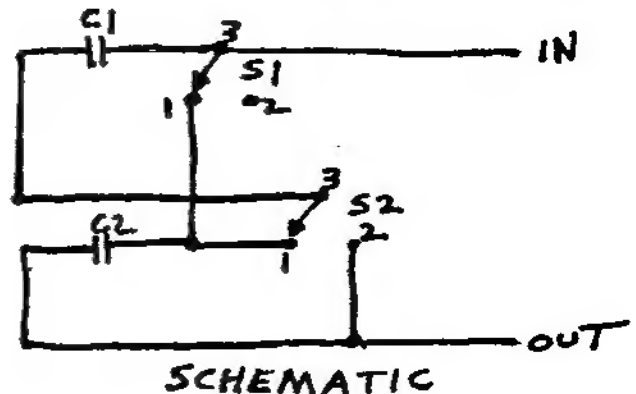
Note: Before looking at the schematic, try to come up with your own scheme for performing this switching function - the method is simple but may not be immediately obvious.



CIRCUIT LAYOUT



SWITCH SCHEMATIC



SCHEMATIC

S1	S2	CAPACITANCE
1	1	C2
1	2	C1 + C2 in parallel
2	1	C1 + C2 in series
2	2	C1

EXAMPLE VALUES

C1 = 20	C1 = 50	C1 = 80
C2 = 10	C2 = 10	C2 = 20
10 PF	10	20
30 PF	60	100
6.6 PF	8.3	16
20 PF	50	80

...Bill - WB6W00

OCARC NEW MEMBERS

ByronValle - W6ATP	13582 Prospect Avenue, Santa Ana 91705	- 838-6113
Jerri Cooper - WA6QFO	15861 Rose Lane, Westminster 92683	
Al Cooper - WA6QFN	15861 Rose Lane, Westminster 92683	
Lynn V. Hull - WB6PEF	14752 Bridgeport Road, Tustin, 92680	- 832-0150
Doug Clough - WN6FDQ	1292 Mauna Loa Road, Tustin 92680	- 544-9639
Dave Arnett - K6SAP	11303 Pennell Circle, Fountain Valley 92708	- 839-8251

WELCOME!!!

OCTOBER BOARD MEETING

An OCARC Board Meeting was held October 3rd at the home of Kei-NGO. The primary reason for the meeting was to hold discussion on how the Club would be able to assist any amateurs or their neighbors in cases of TVI complaints. The problem was brought to the attention of the Board by a phone call to Prez, Ken-HHC, concerning a case of alleged TVI by an amateur in Tustin, Calif. (For more on this, see "Prez Sez" column.)

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SEPTEMBER OCARC MEETING

Many thanks to Ray Hodges - W6AQP, of Atlas Radio, for a fine presentation of the Atlas - 180 solid-state transceiver.

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OCTOBER MEETING -- AUCTION!

Be sure to be on hand at this month's club meeting, as we are holding the OCARC Annual Auction. A few rules adopted by the Board for this year's auction are as follows:

1. There will be a seller's registration fee of \$1.00 for all sellers. This should be paid upon arrival to Treasurer, Harold Richards - WA6BJO.
2. After receipt of sellers registration fee, Harold will assign each seller with a sellers' number. This number will be used in conjunction with an item number, to identify all items to be sold. (For example: A seller is assigned a sellers' number of #5, and he has 5 items for auction. His items will be tagged as items 5-1, 5-2, 5-3, 5-4, & 5-5...the first half of the number being the sellers number, and the other half, the item number.)

Other information to be written on each tag will be the seller's name and call, and minimum acceptable bid.
3. The Club's Auction Sales Fee will be 10% of all monies received by a seller.
4. Only three items at a time will be offered for auction from each sellers lot, on the initial go-around. Thereafter, the auctioneer will commence auctioning all remaining items of each seller.

For any further information, contact Harold - BJO. Items should be limited to electronics and please, "NO JUNK."

THE FATAL CURRENT

Strange as it may seem, most fatal electric shocks happen to people who should know better. Here are some electro-medical facts that should make you think twice before taking that last chance.

IT'S THE CURRENT THAT KILLS

Offhand it would seem that a shock of 10,000 volts would be more deadly than 100 volts. But this is not so! Individuals have been electrocuted by appliances using ordinary house currents of 110 volts and by electrical apparatus in industry using as little as 42 volts direct current. The real measure of shock's intensity lies in the amount of current (amperes) forced through the body, and not the voltage. Any electrical device used on a house wiring circuit can, under certain conditions, transmit a fatal current.

While any amount of current over 10 milliamps (0.01 amp) is capable of producing painful to severe shock, currents between 100 and 200 mA (0.1 to 0.2 amp) are lethal.

Currents above 200 milliamps (0.2 amp), while producing severe burns and unconsciousness, do not usually cause death if the victim is given immediate attention. Resuscitation, consisting of artificial respiration, will usually revive the victim.

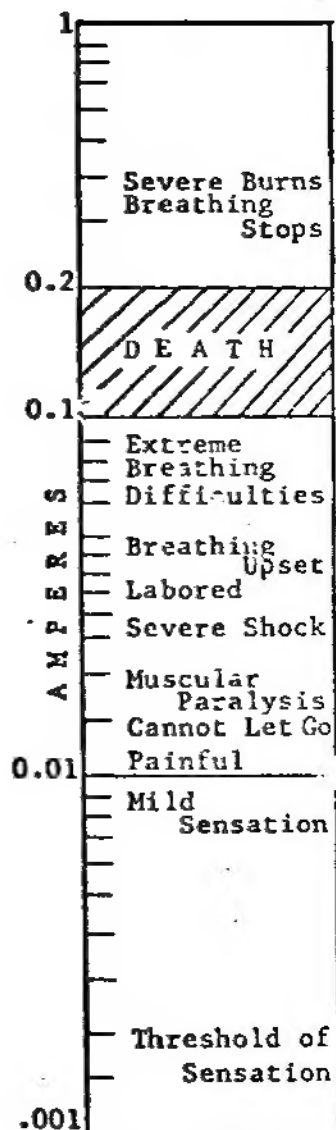
From a practical viewpoint, after a person is knocked out by an electrical shock it is impossible to tell how much current passed through the vital organs of his body. Artificial respiration must be applied immediately if breathing has stopped.

THE PHYSIOLOGICAL EFFECT OF ELECTRIC SHOCK

Chart 1 shows the physiological effect of various current densities. Note that voltage is not a consideration. Although it takes a voltage to make the current flow, the amount of shock-current will vary, depending on the body resistance between the points of contact.

As shown in the chart, shock is relatively more severe as the current rises. At values as low as 20 milliamps, breathing becomes labored, finally ceasing completely even at values below 75 milliamps.

As the current approaches 100 milliamps, ventricular fibrillation of the heart occurs... an uncoordinated twitching of the walls of the heart's ventricles.



Physiological Effects of
Electric Currents

THE FATAL CURRENT, CONT.

Above 200 milliamps, the muscular contractions are so severe that the heart is forcibly clamped during the shock. This clamping protects the heart from going into ventricular fibrillation, and the victim's chances for survival are good.

DANGER -- LOW VOLTAGE

It is common knowledge that victims of high-voltage shock usually respond to artificial respiration more readily than the victims of low-voltage shock. The reason may be the merciful clamping of the heart, owing to the high current densities associated with high voltages. However, lest these details be misinterpreted, the only reasonable conclusion that can be drawn is that 75 volts are just as lethal as 750 volts.

The actual resistance of the body varies depending upon the points of contact and the skin condition (moist or dry). Between the ears, for example, the internal resistance (less than skin resistance) is only 100 ohms, while from hand to foot it is closer to 500 ohms. The skin resistance may vary from 1000 ohms for wet skin to over 500,000 ohms for dry skin.

When working around electrical equipment, move slowly. Make sure your feet are firmly placed for good balance. Don't lunge after falling tools. Kill all power, and ground all high-voltage points before touching wiring. Make sure that power cannot be accidentally restored. Do not work on underground equipment.

Don't examine live equipment when mentally or physically fatigued. Keep one hand in pocket while investigating live electrical equipment.

Above all, do not touch electrical equipment while standing on metal floors, damp concrete or other well grounded surfaces. Do not handle electrical equipment while wearing damp clothing (particularly wet shoes) or while skin surfaces are damp.

Do not work alone! Remember the more you know about electrical equipment, the more heedless you're apt to become. Don't take unnecessary risks.

WHAT TO DO FOR VICTIMS

Cut voltage and/or remove victim from contact as quickly as possible--but without endangering your own safety. Use a length of dry wood, rope, blanket, etc., to pry or pull the victim loose. Don't waste valuable time looking for the power switch. The resistance of the victim's contact decreases with time. The fatal 100 to 200-milliampere level may be reached if action is delayed.

If the victim is unconscious and has stopped breathing, start artificial respiration at once. DO NOT STOP RESUSCITATION UNTIL MEDICAL AUTHORITY PRONOUNCES THE VICTIM BEYOND HELP. It may take as long as eight hours to revive the patient. There may be no pulse and a condition similar to rigor mortis may be present; however these are the manifestations of shock and are not an indication the victim has succumbed.

SALE CORNER

SWAN "120" 20 mtr. with home-brew power supply.

\$75.00

Ted Lincoln - WA6HWJ Phone: (714) 557-8796

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SWAN FM2X 2 MTR XCVR. AC P/S Mic. 12 Channel capability,
6 channels installed. Cush-Craft AR-2 Ringo Ant.
Cush-Craft ASP-556 magnetic mount 1/4 wave mobil ant.
Hustler 5/8 wave mobil ant. DC connectors. \$180.00
Contact: Art - WA6LHB 832-9676.

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ORANGE COUNTY AMATEUR RADIO CLUB, INC.
POST OFFICE BOX 95
ORANGE, CALIFORNIA 92688

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FIRST CLASS!!!

DATED MATERIAL !!!